

User Charge Analysis

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Agenda

Introduction

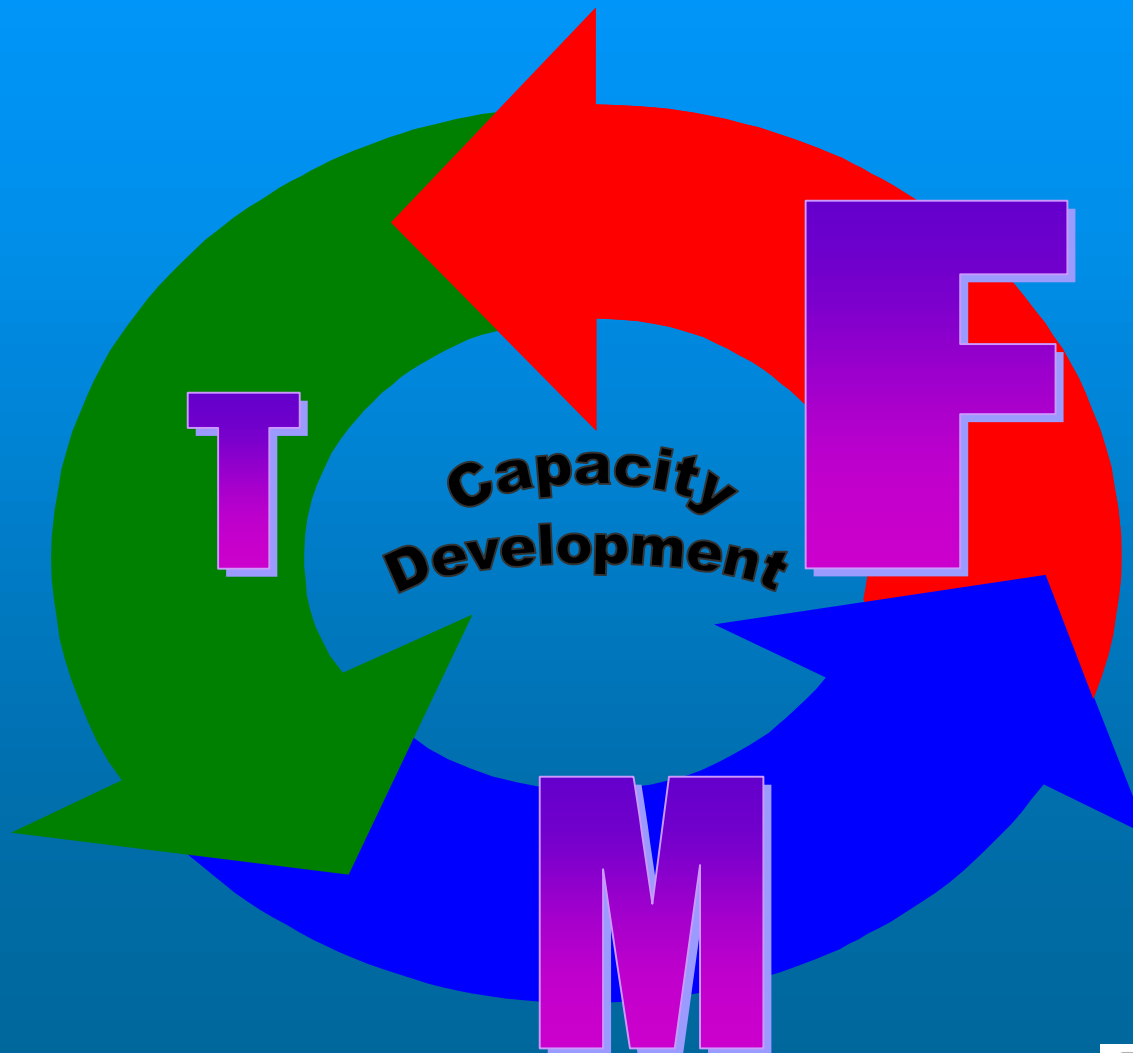
Why you need an analysis

Key ratios and indicators

**Show-me Ratemaker software
demonstration**

Wrap-up/Questions

TMF Watch



Why Analyze?

Do our rates:

- **Cover current costs?**
- **Cover future costs?**
- **Cover repairs, replacements and unexpected expenses?**
- **Charge our customers fairly?**

Why Analyze?

As a system, are we:

- **Able to build new facilities?**
- **Going to apply for grants/loans?**
- **Being challenged by the economy, by inflation or interest rates?**
- **Growing or declining?**

The Bottom Line on “Why Analyze”

What is our TMF Capacity today?

How will it look in the future?

To Answer Those Questions

**Analyze operations and expenses
(Called TMF Assessment)**

Improve operations/cut expenses

**Analyze rates, propose
adjustments**

Build support for new rates

Adjust rates, track results

Types of Rates

Proportional to use rates are based on the volume of water or sewer service each customer receives (use neutral.)

Cost to serve rates are based on the costs that each customer or customer class causes the system to incur (use neutral.)

Types of Rates

Conservation rates go up as volume usage goes up (encourage water conservation.)

Declining rates go down as use goes up (encourage water consumption.)

Arbitrary rates are ... arbitrary.

Why Proportional Rates?

Hancock amendment (tax vs. fee)

Grants and loans

- **Required for some department funding**
- **Preferred by others**

Proportional is simple, easy to understand, and fair

The Analysis Will Help you Track



Operating ratio

Coverage ratio

**Other key
indicators**

Operating Ratio

$$\frac{\text{Total Operating Revenue}}{\text{Total Operating Expenses}} = \text{Operating Ratio}$$

Operating Ratio

Revenues include: Expenses Include:

- User fees
- Hook-up fees
- Taxes
- Interest
- Cash carry over/
fund transfers
- Other revenues

- Administration
- Wages
- Benefits
- Utilities
- Supplies
- Other (non-debt)
operating
expenses

Operating Ratio

“Break-even” operating ratio is 1.0

Less than 1.0 and you are operating in the red (at least on paper).

> 1.15 -- for larger systems

> 1.30 -- for smaller systems

> 1.50 -- Moody's target ratio

> 1.20 -- for CDBG funding

Coverage Ratio

**Revenue Available
for Debt Service**

**Annual Debt Service
Expenses**

**= Coverage
Ratio**

Coverage Ratio

Banks, other lenders and bond buyers consider coverage ratio a good ratio of sound fiscal management

Less than 1.0, you can't pay your debt

> 1.25 is a common target

> 1.90 Moody's target for high bond rating

Affordability Index

The percentage of annual median household income (AMHI) needed to pay for a utility service (water, sewer, etc.)

CDBG looks for user fees $> 1.5\%$ of the average residential customer's AMHI

A Good User

Charge Analysis Should:

Show you current and projected financial status

Help you develop new rates; allow you to see future projections

Help in grant and loan applications

Help schedule funds needed for system R & R

A Good User Charge Analysis Should:

**Show you key financial
indicators:**

- **affordability index, operating ratio, coverage ratio**

Demonstrate the rate effects of:

- **fixed and variable costs, R & R costs, interest and inflation rates**

A Good User Charge Analysis Should:

Estimate water loss or I&I costs

**Give you graphical illustrations
for management decisions and
public meeting forums**

Information you Need for an Analysis

**Current rate chart and other
charges**

**Customer usage and actual
revenue data for past 12 months**

Misc. fees and all other revenues

Fund Reserves

R & R schedule

Information you Need for an Analysis

Capital improvements planned

Operating and debt expenses

Growth rate of your community

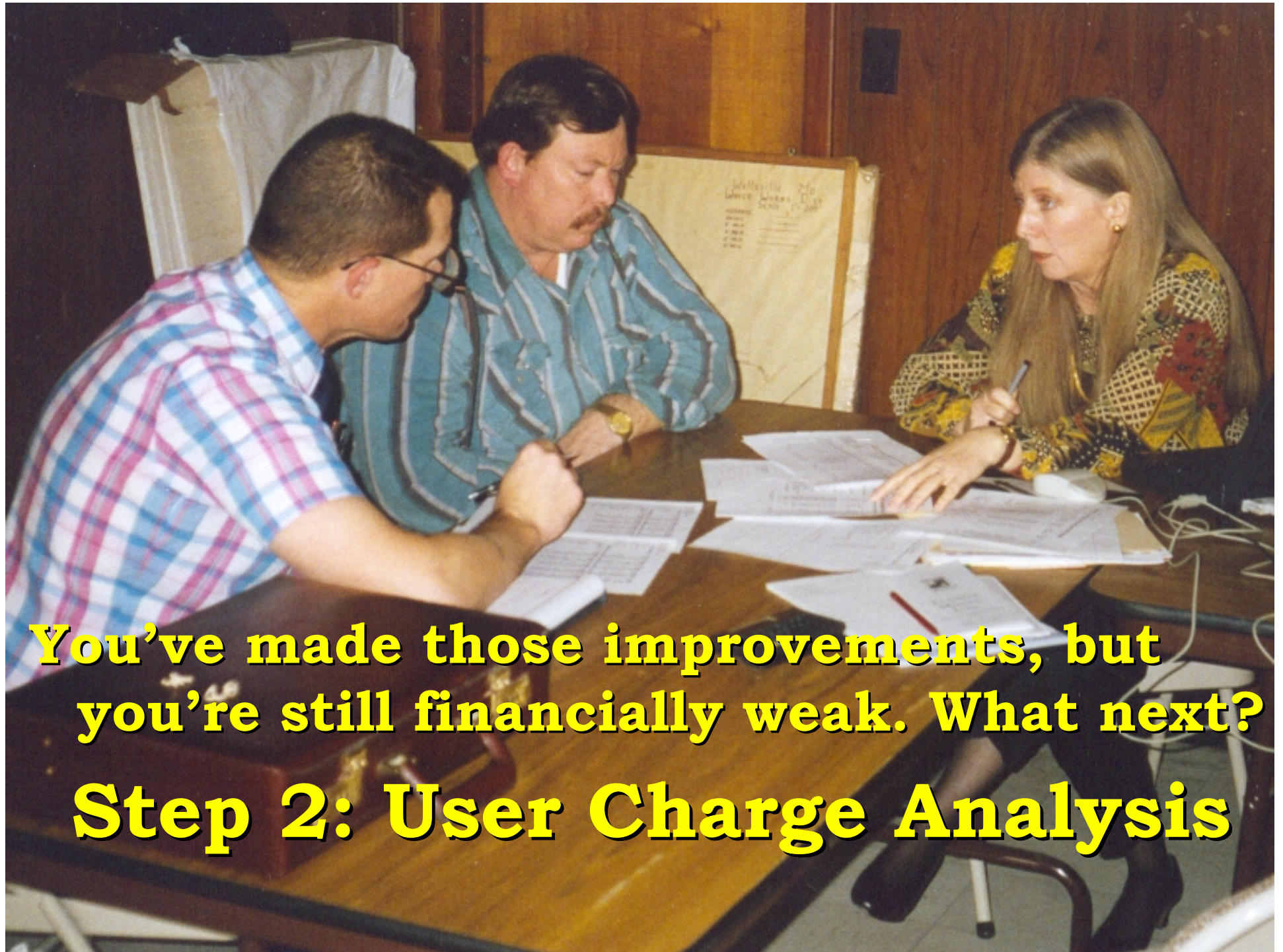
**Total water produced or total
sewage volume treated**

**Estimate of water losses or sewer
system I & I**

Having Cost and Revenue Problems?

Step 1: Assess TMF

- Identify potential problem areas
- Improve operations
- Reduce expenses

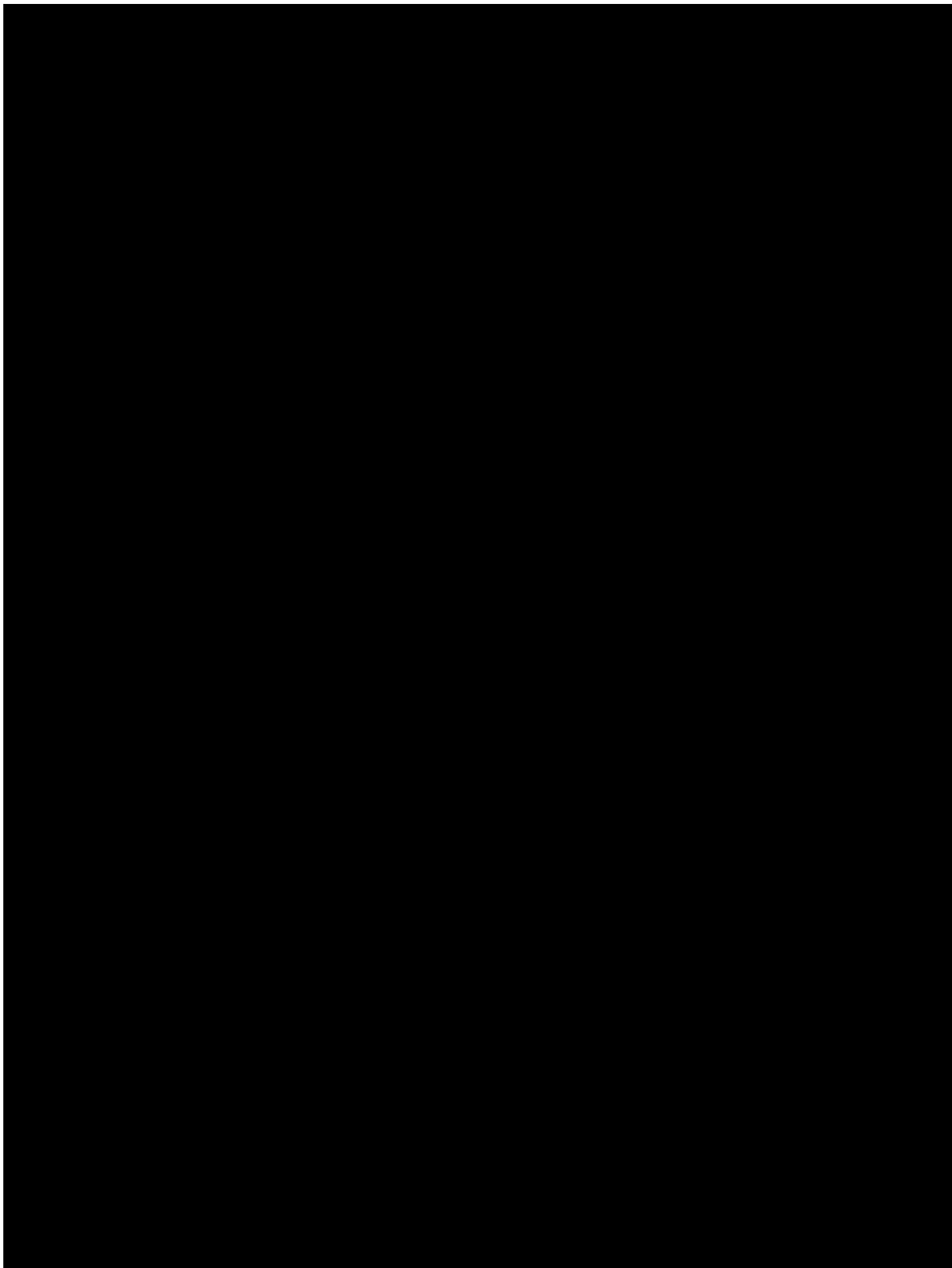


You've made those improvements, but you're still financially weak. What next?

Step 2: User Charge Analysis

Questions?

To the Software



For Technical Assistance

Environmental Assistance Office

- **Show-me Ratemaker Software and workshops on our Home page:**
www.dnr.mo.gov/oac/lgov.htm

- **Call EAO at 1-800-361-4827**

Other agencies (RPCs, MAP, etc.)

Private consultants/engineers

Summary

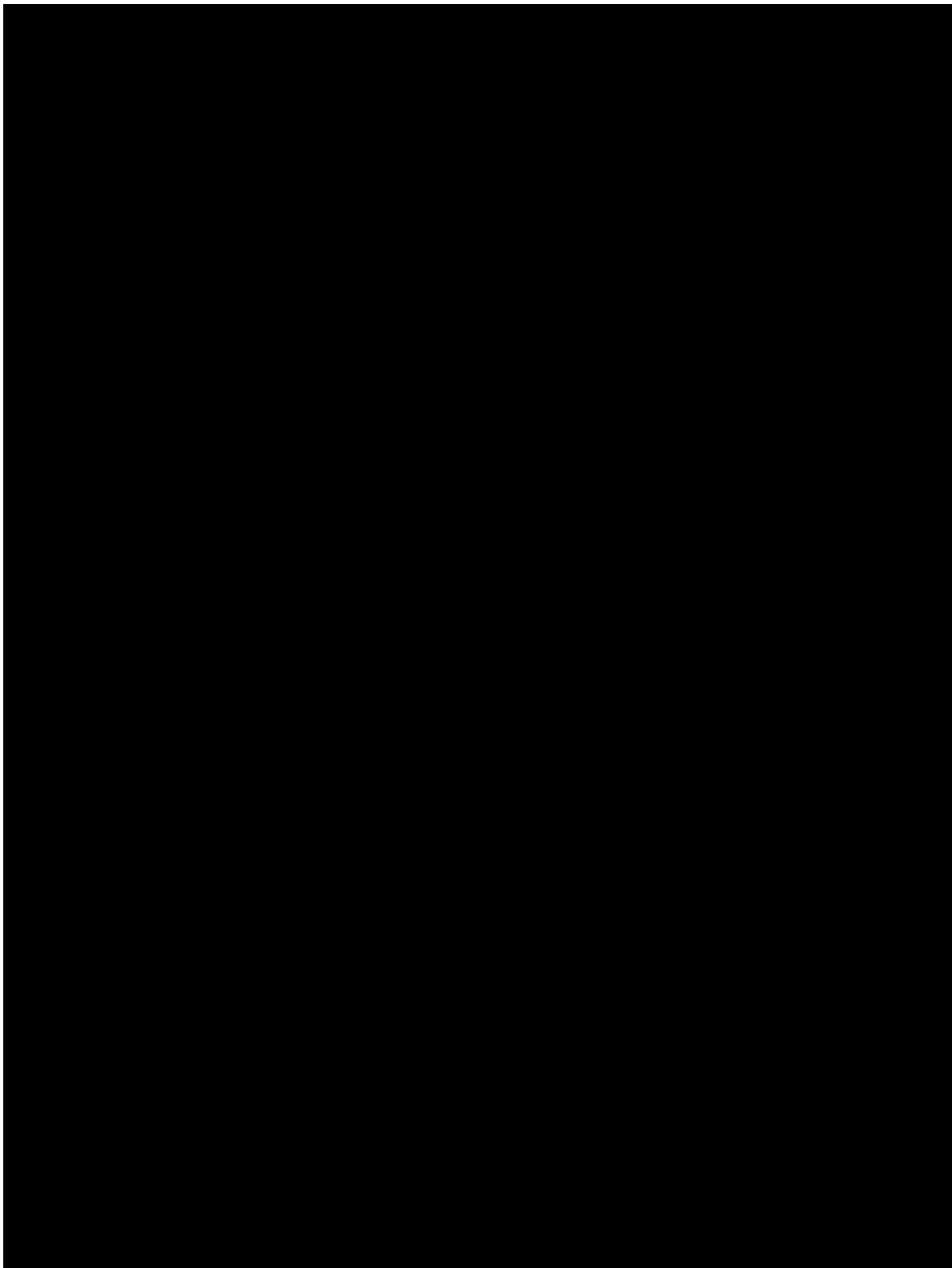
The Secret to a Great Analysis:

Just do it.

Then do it some more.

**Analysis is something you learn
as you go, and the product gets
better as you work on it.**

Questions?



Postscript

Points To Remember

Good rate structures are based on good budgets and good records.

Arbitrarily adding \$3 to every bill seldom results in fair and equitable rates.

Points to Remember

Rate structures should be easy for customers to understand and easy for you to administer.

Fee policies should be in writing and enforced.

Points to Remember

A utility's revenues should not be used to pay for other municipal services, or vice versa.

Customers and citizens should know why rates are set as they are. By performing the analysis, you can tell them.

Short-term TMF Solutions

Customer billing

- Make sure billing is timely

Bill all users

- Hospitals, schools, churches
- Other government departments like police, city parks, public buildings

Short-term TMF Solutions

Overdue accounts make the majority of customers subsidize slow payers.

Strictly enforce collection and shut off policies.

Increase penalties.

Short-term TMF Solutions

Have meter-readers look for signs of water theft such as:

- **Illegal tapping**
- **Meter Tampering**
- **Meter by-pass**

Key Points

Don't Forget about the Hancock Amendment:

- Fees can be raised without an election (vote of the people)
- Taxes cannot

Key Points (cont.)

Abide by the Sunshine Law

**Neglect the Sunshine Law and
you can be sued and your rate
increases can be voided.**